

L 30734-66 EMP(f)/EMP(c)/EMP(v)/T/EMP(k)/EMP(h)/EMP(l)

SOURCE CODE: RU/0018/65/000/010/0577/0581

ACC NR: AP6022113

AUTHOR: Engel, Harry

20

B.

ORG: none

TITLE: Contributions to the calculation of manufacturing cycles

SOURCE: Constructia de masini, no. 10, 1965, 577-581

TOPIC TAGS: industrial management, production engineering

ABSTRACT: The author analyzes the calculations involved in determining the duration of the manufacturing cycle for mass-produced items, and suggests some precautions to be observed if one is to assure correct determinations. Orig. art. has: 6 figures and 1 table. Based on author's Eng. abst. [JPRS]

SUB CODE: 05, 14 / SUM DATE: none

UDC: 62:338.062.5

ENGEL, J.

Determination of trigonometrical points by a graphic method. p. 105. (GEODETICKY
A KARTOGRAFICKY OSZOR, Vol. 3, No. 6, June 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

1ST AND 2ND DEPT.										3RD AND 4TH DEPT.									
<p>ENGEL, L.</p> <p>Textile from the stems of hops. László Engel. Hung. 116,663, Aug. 2, 1937. Hops stems are enriched, boiled in a 10% K_2CO_3 soln. for 70 min., dyed out, treated with a 2-4% Na_2O_2 soln. or dyed, then treated with a soln. of sulfated higher alcs., washed out and worked up as usual.</p>																			
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
<p>ASB-SLA</p>										<p>ASB-SLA</p>									

Ba. ENGEL, L.

Technical uses of hydrazine. L. Engel. (Prakt. Chem., 1952, 3, 56-7)
A Review. A.R. Pearson

ENGEL, Leonard

Strange transigrations of birds. Prir i zmanie 16 no.2:
13-15 F '63.

1. ENGEL', L. K., Eng.
2. USSR (600)
4. Loading and Unloading
7. Suggestions of rationalizers, Sbor. mat. o nov. tekhn. v stroi, 15, no. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

1ST AND 2ND ORDERS		PROCESSING AND PROPERTIES INDEX	
<p>ENGEL, M.</p> <p>02</p>		<p>01</p>	
<p>Sterilizing experimental tumors by means of new caemo- therapeutics. Mihaly Vanyo and Miklos Kossel. <i>Onco-</i> <i>Medica</i> 82, 978(1968). Expts. with rats showed that tu- mors can be sterilized by simultaneous subcutaneous injec- tions of desoxytyl (p-aminobenzenesulfonamide) and eth- yl (4-(4'-aminobenzenesulfonamido) dimethylbenzene-sul- fonamide) salts. After such injections bacterium-free cultures could be produced from the tumors. H. S. de Finis</p>			
<p>ASB SLA OPTAILUNGMAI LITERATURE CLASSIFICATION</p>			

1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH ORDERS	
ENGEL, M.				11A	
<p>Experiments with melanin. K. Kovacs and M. Engel. <i>Magyar Orvosi Arch.</i> 43, 225-32 (1941). — Melanin reduces ammoniacal solns. of Ag salts to Ag and, owing to its large surface area, fixes the Ag formed. It also retards the reduction of such solns. by aldehydes and the action of blood catalase on H_2O_2. This effect is due to the surface action of the melanin (protective colloid). H. C. P. A.</p>					
A.S.M.-I.S.A. METALLURGICAL LITERATURE CLASSIFICATION					
SUBJECT		AUTHOR		PUBLICATION	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	

CIA-RDP86-00513R000412120

ENGEL, OLEG

CZECH

Z. Enrichment of basic slag with apatite. Oleg Engel. Hutnické Listy 10, 82-83 (1955). -- Results of exper. on enrichment of basic converter slag with powdered apatite are described. These results show that it is possible to carry out enrichment with careful control of slag compn. to maintain the ratio $\text{SiO}_2:\text{P}_2\text{O}_5$ near 0.42 and the content of CaO at about 48%. The addn. of an amt. of apatite causing the total content of P_2O_5 to rise above 10% is not economical, because with this amount of P_2O_5 it is not possible to maintain the content of SiO_2 and CaO necessary for soly. above 90%.

Petr Schneider

ENGEL', O. S. Cand. Biolog Sci.

Dissertation: "Gas Exchange as a Factor in Fruit Ripening." Inst of
Physiology of Plants imeni K. A. Timiryazev, Acad Sci USSR, 29 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)

ENGEL', O.S.

PA 175T8

USSR/Biology - X-Rays, Effect of

21 Apr 50

"Influence of Vernalization of Winter Wheat Seeds on the Sensitivity of the Shoots to the Action of X-Rays," O. S. Engel', Inst Physiol of Plants imeni K. A. Timiryazec, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXI, No 6, pp 1151-1153

Expt discussed here studied growth of stems and roots of samples of winter wheat, vernalized and nonvernalized, over period of 4 days. Growth measured for vernalized and nonvernalized samples bombarded by different quantities of X-rays and compared to control sample not so bombarded. Submitted 25 Feb 50 by Acad N. A. Maksimov.

175T8

ENGEL', O. S.

Wheat

Relationship of the duration of swelling of
wheat seeds and of the change in their
sensitivity to irradiation.
Dokl. ANSSSR 85 no. 1, 1952.

Monthly List of Russian Accessions. Library of Congress November 1952. UNCLASSIFIED.

~~X~~ENGEL', C. S.

X-rays - Physiological Effect

Physiological state of potato tubers is a factor in the X-ray sensitivity of their tissue.
Dokl. AN SSSR 85 no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

EN Bel', U.S.

ENGEL', O.S.

Mobilization of endosperm foods during the germination of sunflower seeds
[with summary in English]. Fiziol. rast. 4 no.6:514-519 N-D '57.

(MIRA 10:12)

1. Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR, Moskva.
(Germination) (Sunflowers)

ENGEL', O.S.; PROKOF'YEV, A.A.

Effect of the water content of seeds on the mobilization of
reserve substances during germination. Fiziol.rast. 7
no.1:44-48 '60. (MIRA 13:5)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy
of Sciences.
(Germination)

ENGEL, P. 29

Artificial leather. Pál Engel and Ferenc Hev. Hung.
 130,903, Jan. 15, 1943. The fleshy material removed from
 the inner side of animal skins is washed with water at 20°
 for 3 hrs., delimed by treating with HCl, HCO₂H, or Na-
 sulfite soln., treated with HCl or other acid, sodium sulfate,
 and chlorite for 10-16 hrs., tanned first with a soln. contg.
 alum or Cr salt of low basicity or with synthetic tanning
 agents, and tanned again until the material is fully satd.
 Then excess tallow is removed, the residue is washed with
 water at 30° for 6 hrs., and treated, if desired, with fats or
 hydrophobic substances; binding materials, as resins,
 artificial resins, collodion, glue or gelatin, are added,
 and the product is pressed to plates in the hot or the cold
 state. István Pórkó

ASAC 33.4 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ENGEL, V.

How machine-tractor stations should prepare for spring work. p. 57.

College-educated mechanizers in our ranks. p. 58.

MECHANISACE ZEMEDELSTVI, Praha, Vol. 5, no. 4, Feb. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

AUTHORS: Engel', V.Yu., Kireyev, Yu.A. SOV/90-58-11-3/6

TITLE: Using the Automobile Starter ST-26 as a Starter for D6 Engines (Zapusk dvigateley D6 avtomobil'nykh starterom ST-26)

PERIODICAL: Energeticheskii byulleten', 1958, Nr 11, pp 18 - 21 (USSR)

ABSTRACT: The author proposes using the automobile starter ST-26 as a starter for the D6-cylinder engine. Besides an auxiliary compressed-air starter, the D6 engines were until now equipped with a powerful electrostarter ST 710 with 15 h.p. capacity. The author states that automobile starter ST-26 will do the same work about 30% cheaper, that it is easier to install and that its installation makes the installation of other auxiliary equipment easier. There are 3 photos, 1 circuit diagram, 2 tables and 2 Soviet references.

1. Internal combustion engine starters---Performance

Card 1/1

CHERNENKO, A.R.; SIMFOROV, G.Ye.; SHKUTA, E.I.; TEREKHOV, I.P.;
POLYANSKIY, F.S.; PISANKO, K.S.; SHENDRIK, V.K.; AL'TSHULER,
M.A.; RIVKIN, I.D.; ENGEL', Ya.R.; CHETYRKIN, M.I., red.isd-va;
PYL'NEN'KIY, A.A., red.isd-va; OSVAL'D, N.Ye., red.isd-va;
PROZOROVSKAYA, V.L., tekhn.red.

[Sharp increase in the labor productivity of Krivoy Rog Basin
miners; practices in the "Bol'shevik" and "Gigant" mines]
Krutoi pod'em proizvoditel'nosti truda gornikov Krivbasas;
iz opyta raboty shakht "Bol'shevik" i "Gigant." Moskva, 1960.
173 p. (MIRA 13:11)

(Krivoy Rog Basin--Iron mines and mining--Labor productivity)

ENGEL, V.

Effective organization of work is a guarantee for fulfillment of tasks
by machine-tractor stations. p. 417.
We shall conclude the autumn work on November 28 p. 417.

MECHANISACE ZEMEDELSTVI. Praha. Vol. 4, no. 22, Nov. 1954.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

ENGEL, Z., dr inz.

Problems concerning the dynamics of metallurgical machinery.
Hutrik 31 no.12:401-402 D '64.

ENGEL, Zbigniew (Krakow)

Nonlinear coupling to the centrifugal regulator. Zagad
drgan nielin 3 65-71. '62.

BEBEN, Artur, mgr inz.; ENGEL Zbigniew, dr inz.; LOSIAK, Stanislaw, mag. iur.

Possibilities of shot-hole drilling in hardened iron slag.
Hutnik P 30 no. 7/8:229-235 J1/Ag'63.

1. Akademia Gorniczo-Hutnicza, Krakow.

ENGEL'MAN, Iosif Moiseyevich; DANILOVA, V.M., red.; STREL'NIKOV, I.N.,
tekhn. red.

[This is very important for one's health] Eto ochen' vazhno
dlia zdorov'ia. Ioshkar-Ola, Mariiskoe knizhnoe izd-vo,
1962. 153 p. (MIRA 15:10)

(HYGIENE)

IYEVLEV, Aleksey Vasil'yevich, inzh.; ~~ENCEL'-KRON, I.V.~~, red.; SHNEYEROV,
S.A., red.isd-va; LELYUKHIN, A.A., tekhn.red.

[Operation of small steam turbines] Eksploatatsiia parovykh
turbin nebol'shikh moshchnostei. Moskva, Izd-vo M-va kommun.
khoz.BSPSR, 1959. 266 p. (MIRA 12:12)
(Steam turbines)

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ENGELBERTH, O.

Brucellosis. Cas. lek. cesk. 89 no.39:1082-1085 29 Sept. 1950.
(CLM 20:1)

1. Of the Third Internal Clinic in Prague (Head--Prof. J. Charvat,
M. D.).

ENGELBERTH, O.; SCHMITTOVA, M.

Essay of development of anaphylactic carditis in mice. Cas.lek.cesk.
90 no.17:508-515 27 Apr 51. (CIAM 20:8)

1. Of the Third Internal Clinic of Charles University (Head--Prof. J. Charvat, M.D.) and of the Second Pathologico-Anatomical Institute of Charles University (Head--Prof. V. Jedlicka, M.D.).

ENGELBERTH, O. and Others.

"Infarction of the Myocardium with a Perforation of the Interventricular Septum of the Heart Diagnosed in Vivo." p. 1259 (CASOPIS LEKARU CESKYCH, Vol. 92, No. 46, Nov. 1953)
Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4,
April 1954. Unclassified.

POLAK, H.; KUCHEL, O.; ENGELBERTH, O.

Influence of trophic nerves on hormonal function. 2. Cas. lek.
cesk. 94 no.43:1150-1153 21 Oct 55.

1. Z III. interni kliniky KU v Praze, Prednosta akademik J. Charvat.
(NERVES, physiology
trophic funct.; eff. of hormone metab.)
(HORMONES, metabolism
eff of trophic nerv funct.)

ENGELBERTH, O.; KUCHEL, O.; POLAK, H.

Effect of innervation on penetration of hyaluronidase through the connective tissue and its depression by sodium salicylate in vivo. Cesk. fysiол. 5 no.1:56-63 26 Mar 56.

1. III. interni klinika lekarske fakulty Karlovy university, Praha.

- (HYALURONIDASE, metabolism,
connective tissue, eff. of myelotomy and sympathectomy
in rats (Cz))
- (CONNECTIVE TISSUE, metabolism,
hyaluronidase, eff. of myelotomy & sympathectomy in
rats (Cz))
- (SYMPATHETIC NERVOUS SYSTEM, physiology,
eff. of section on connective tissue penetration by
hyaluronidase (Cz))
- (SPINAL CORD, physiology,
same)

ENGELBERTH, O.; SCHMITTOVA, M.

Effect of sodium salicylate on experimental carditis in mice. Cas.
lek. cesk. 96 no.33-34:1037-1041 23 Aug 57.

ENGELBERTH, O.

EXCERPTA MEDICA Sec 12 Vol 2/11 Card. Dis. Nov 58

3358. *Effects of mono- and di-hydroxy derivatives of benzoic acid on experimental carditis of mice* Účín mono- a dihydroxyderivátů kyseliny benzoové na pokusnou karditidu u myši. ENGELBERTH O., SCHMITTOVÁ M., VEČERKOVÁ J. and MALÝ V. III. Vnitřní KU; II. Pathol.-Anat. Ústav pro Lék. Chem. KU; Ústav pro Org. Zdravotnictví KU, Praha *Vnitřní Lék.* 1958, 4/2 (104—110) Tables 3

The anti-inflammatory action of mono- and di-hydroxy derivatives of benzoic acid was studied according to the degree to which these were able to prevent the development of anaphylactic carditis in white mice. All the derivatives had an anti-inflammatory action of varying degree, relatively least effective was m-hydroxybenzoic acid. The action of the compounds was statistically significant up to a 1% limit (for m-hydroxybenzoic acid only to a 5% limit). On the other hand the difference in anti-inflammatory action as compared with Na salicylate was not statistically significant with the exception of 2:6-dihydroxybenzoic (γ -resorcylic acid) and 3:5-dihydroxybenzoic acid (α -resorcylic acid). But there also, the difference is only significant on the 5% limit.

(II, 18)

EXCERPTA MEDICA Sec 2 Vol 13/5 Physiology May 60

2627. RHEUMATIC FEVER PRODUCED AS MODEL DISEASE IN EXPERIMENTAL ANIMALS - Modelové onemocnění revmatické horečky vyvolané u pokusných zvířat - Engelberth O. and Schmittová M. Praha 2, u Nemocnice I - VNITŘNÍ LÉK. 1958, 5/8 (870-878)

Model diseases reproducing rheumatic fever in animals are of great importance for elucidating the pathogenesis of this disease and also for research on new drugs against rheumatic fever. All experiments on production of a model disease of this kind in animals rely on the following basic principle: as a result of some exogenous impulse a change of reactivity develops in the host, and is directly responsible for

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the origin of pathological tissue changes. This is the basis for experiments using hypersensitivity to foreign proteins, or streptococci and their toxins, experimental induction of Shwartzman reactions with products from A-haemolytic streptococci, and experimental induction of tissue lesions by means of auto-antibody production. Only experiments using direct infection with bacteria and viruses discount changes of host reactivity. Brief mention is also made of Selye's experiments on rats using excessive doses of desoxycortone. None of the models in animals has so far reproduced all the features of rheumatic fever. The chronic course characteristic of rheumatic fever in particular, with its tendency to frequent exacerbations, escapes reproduction.

SCHMITTOVA, M.; ENGELBERTH, O.; SRAMKOVA, J.

Effect of aminopyrine, paraaminobenzoic acid and paraaminosalicylic acid on experimental carditis in mice. Cas.lek.cesk. 98 no.44:1365-1369 30 0 '59.

1. II. patol. anatomicky ustav KU v Praze, prednosta prof. dr.
V. Jedlicka, III. interni klinika KU v Praze, prednosta akademik
J. Charvat.

(PARAAMINOSALICYLIC ACID pharmacol.)

(PARAAMINOBENZOIC ACID pharmacol.)

(AMINOPYRINE pharmacol.)

(MYOCARDITIS exper.)

ENGELBERTH, Otto; BLEHA, Otto; JEZKOVA, Zdenka; SRAMKOVA, Jarmila; Technicka
spoluprace HORSKA, Eva

Autoimmune thyroiditis. Cas. lek. cesk. 101 no.31:948-950 27 J1 '62.

1. III interni klinika fakulty vseobecneho lekarstvi KU v Praze, pred-
nosta akademik J. Charvat. Ustav hematologie a krevni transfuze v
Praze, reditel prof. dr. J. Horejsi, DrSc.

(THYROIDITIS immunol)

ENGELBERTH, Oto; SCHMITTOVA, Marie

Effect of benzoic acid derivatives on experimental carditis in mice.
Cas. lek. cesk. 101 no.28:860-864 13 J1 '62.

1. III. interni klinika fakulty vsebečného lékařství KU v Praze,
prednosta akademik J. Charvat. Patologickoanatomické oddelení
OUNZ Most, vedoucí MUDr. M. Schmittová.
(ALLERGY exper) (HEART DISEASES exper)
(BENZOATES toxicol)

ENGELBERTH, O.

3

CZECHOSLOVAKIA

ENGELBERTH, O; BLEHA, O; JEZKOVA, Z; SRAMKOVA, J.

Third Internal Medicine Clinic FVL KU and
Institute of Hematology and Blood Trans-
fusion (Z III. vnitřní kliniky FVL KU a Ústav
hematologie a krevní transfuze), Prague -
(for all)

Prague, Vnitřní lékařství, No 3, 1963, pp 255-258

"Autoaggressive Thyroiditis."

CZECHOSLOVAKIA

ENGELBERTH, O., Docent MD.

Third Internal Medicine Clinic of the Faculty of General
Medicine of Charles University (III interni klinika
fakulty všeobecného lékařství KU), Prague

Prague, Praktický lékař, No 11, 1963, pp 401-403

"Experiences of the Clinic During the Last Few Years
in Epidemic Influenza."

CZECHOSLOVAKIA

BROUSIL, J., ENGELBERTH, O., SRAMKOVA, J., and TALPOVA, H. [Biophysical Institute (Biofyzikalni ustav), Faculty of General Medicine (Fakulta vseobecneho lekarstvi), Charles University, Prague, Docent Dr. Z. DIENSTBIER, director, and Third Clinic of Internal Medicine (III. interni klinika), Faculty of General Medicine, Charles University, Prague, Academician J. CHARVAT, director.

"Influence of Sodium Salicylate on Antigen Excretion and Antibody Formation in Rabbits"

Prague, Casopis Lekarů Ceských, Vol CII, No 34, 23 August 63, pp 925-927.

Abstract [Authors' English summary]: Following an injection of human serum albumin labelled with I^{131} the authors investigated the influence of sodium salicylate on the antigen excretion from the blood circulation, formation of a soluble complex of antigen and antibodies, and formation of antibodies in rabbits. In a group receiving salicylate the authors found a lower activity in the alpha globulin fraction than in the control group on the 12th and 14th day. A possible interpretation of this phenomenon is presented. Six references.

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1

BROUSIL, J.; ENGELBERTH, O.; SRAMKOVA, J.; TALPOVA, H.

Effect of sodium salicylate on antigen excretion and on antibody formation in rabbits. Cas. lek. cesk. 102 no.34:925-927
23 Ag '63.

1. Biofyzikalni ustav fakulty vseobecneho lekarstvi KU v Praze,
prednosta doc. dr. Z. Dienstbier III interni klinika fakulty
vseobecneho lekarstvi KU v Praze, prednosta akademik J. Charvat.
(SODIUM SALICYLATE) (ANTIBODY FORMATION)
(SERUM ALBUMIN, RADIOIODINATES)
(IMMUNE SERUMS) (ANTIGENS)

BLEGA, O.; ENGEL'BERT, O.; YEZHKOVA, Z.; SHRAMKOVA, Ya.

Importance of autoimmunization reactions in the diagnosis of
diseases of the thyroid gland. Probl. endok. i gorm. 11 no.4:
21-25 J1-Ag '65. (MIRA 18:11)

1. 3-ya terapevticheskaya klinika, Praga.

ENGELBERTH, O.; JEZKOVA, Z.; BLEHA, O.; MALEK, J.; BENDL, J. Technicka
spoluprace: MORAVCOVA, S.; KADEROVA, M.

Autoantibodies in Sheehan's syndrome. Cas. lek. cesk. 104 no.4:
108 29 Ja '65

1. III. interni klinika fakulty vseobecneho lekarstvi Karlovy
University v Praze (prednosta akademik J. Charvat); Ustav hemato-
logie a krevni transfuze (reditel prof. dr. J. Horejsi, DrSc.);
I. porodnicka klinika fakulty vseobecneho lekarstvi Karlovy
University v Praze (prednosta prof. dr. J. Klaus, DrSc.) a II
porodnicka klinika fakulty vseobecneho lekarstvi Karlovy Uni-
versity v Praze (prednosta prof. dr. J. Lukas, DrSc.)

BLFHA, O.; ENGELBERTH, O.; JEZKOVA, Z.; SRAMKOVA, J.

Findings of antibodies in various clinical states of the thyroid gland. Cas. lek. česk. 104, no.12:323-326 26 Mr'65.

1. III. interni klinika fakulty vseobecného lékařství Karlovy University v Praze (prednosta: akademik J. Charvat); a Ústav hematologie a krevní transfuze v Praze (reditel: prof. dr. J. Horejsi, DrSc.).

ENGELBERTH, O.; JEZKOVA, Z.; BLEHA, O.; MALEK, J.; BENDL, J.; Technicka
spoluprace: MORAVCOVA, S.; KADEROVA, M.

Autoantibodies in Sheehan's syndrome. Vnitřní lek. 11 no.8:737-741
Ag '65.

1. III. vnitřní klinika (prednosta akademik J. Charvat), Ústav
hematologie a krevní transfuze (reditel prof. MUDr. J. Horejší,
DrSc.), I. porodnická klinika (prednosta prof. MUDr. J. Klaus,
Dr.Sc), II. porodnická klinika (prednosta prof. MUDr. J. Lukas,
Dr.Sc).

BLEHA, O.; ENGELBERTH, O.; JEZKOVA, Z.; SRAMKOVA, J.

Antibodies in various clinical conditions of the thyroid. Rev.
Czech. med. 11 no.4:246-250 '65.

1. Third Medical Clinic, Faculty of General Medicine, Charles
University, Prague (Director: Academician J. Charvat) and
Institute of Haematology and Blood Transfusion, Prague (Director:
Prof. J. Horejsi, M.D., D.Sc.).

CZECHOSLOVAKIA

ENGELBERTH, O., JEZKOVA, Z., BLEHA, O., MALEK, J., BENDL, J.

1. Third Clinic of Internal Medicine (III vnitřní klinika), (for ?); 2. Institute of Hematology and Blood Transfusions (Ústav hematologie a krevní transfuze), (for ?); 3. First Obstetrical Clinic (porodnická klinika), (for ?); 4. Second Obstetrical Clinic (II porodnická klinika), (for ?).

Prague, Vnitřní lékařství, No 8, August 1965, pp 737-741.

"Autoantibodies in Sheehan's syndrome."

(5)

Endocrinology

CZECHOSLOVAKIA

ENGELBARTH, O.; SRAMKOVA, J.; 3rd Internal Clinic and Laboratory for Endocrinology and Metabolism, Faculty of General Medicine, Charles University (III. Interni Klinika a Laborator pro Endokrinologii a Metabolismus Fakulty Vseobecneho Lekarstvi KU), Prague, Head (Prednosta) Member of Academy J. CHARVAT.

"Immunochemical Determination of Hormone Level in Blood. - Insulin."

Prague, Casopis Lekarů Ceských, Vol 105, No 23, 10 Jun 66, Lokar-ska Veda v Zahranici, pp 105 - 112

Abstract: Chemical and immunological properties of insulin are described. Various forms of insulin found in the blood, and methods for the determination of insulin are discussed. Methods for the determination of insulin in the plasma are evaluated. The various levels of insulin found in some physiological and some pathological conditions are described. 119 Western, 4 Czech references.

ENGEL'GARDT, A. N.

25055. ENGEL'GARDT, A. N. Is Neopublikovannykh Pisem A. N. Engel'gardta K A. P. Mertvago O V. V. Dokuchayeva. (1890-1891) Trudy Yubileynoy Sessii, Posvyashch. Stoletiyu So Dnya. Rozhdeniya Dokuchayeva. M.-L., 1949, 8 679-81.

SO: Letopis' No. 33, 1949

17(3)

AUTHORS:

SOV/20-124-4-60/67
Zil'ber, L. A., . . . Member of the Academy of Medical Sciences, USSR,
Abelev, G. I., Avenirova, Z. A., Engel'gardt, N. V., Baydakova, Z. L.

TITLE:

On the Differences in the Antigen Structure of the Cytoplasm
Granulae of the Liver and of the Hepatoma in Mice (O razlichiyakh
antigennoy struktury tsitoplazmaticheskikh granul pecheni i gepatomy
myshey)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 937-939 (USSR)

ABSTRACT:

Malignant tumors contain specific tumor antigens (Refs 1,2), the
isolation and study of which is at present among the most topical
problems. The evaluation of the precipitation reaction in the gel
(Ref 3) combined with the chemical separation of tissue antigens
proves appropriate for this purpose. By this method, the number of
the individual antigens in the system can be determined, and these
individual antigens can be compared with each other. Said reaction
has several advantages over other reactions. The authors studied
its applicability in the gel, in order to clarify the antigen dif-
ferences of tumor and normal tissues. Contrary to previous papers,
an investigation was made, not of the protein fractions, but of the
cell granulae, as they undergo antigen changes on malignisation
(Refs 7-9). For the purpose of a comparative evaluation of the

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On the Differences in the Antigen Structure of the Cytoplasm Granulae of the Liver and of the Hepatoma in Mice

results obtained by different methods, the anaphylaxis reaction with desensitization was employed. The work was carried out with the en-
twisted heparomata of strain C₅HA mice (Ref 10) and with the livers
of these mice. The granulae mentioned in the title were isolated
from the perfused liver by means of a separator, from a 10 % homo-
genate in an isotonic saccharose solution. Electron microscope
analysis showed the granulae fraction to consist of a mixture of
mitochondria and microsomes. Rabbits were immunized (a) with a
lanolin depot, and (b) without a depot. For the purpose of a better
clarification of the qualitative and quantitative differences be-
tween the preparations to be compared, the reaction was carried out
in the following way: homologous sera and the antigen were placed
at opposite angles of a square (Figure 1). The antigens common to
the systems to be compared yield a uniform spectrum ab, which is
situated between the alveoles with heterologous antigen and serum.
Antigens that are characteristic of one system only show bands
running along the diagonal of the square, their ends touching the
containers of the heterologous systems (cd, ef). Figure 2 gives the
results of the comparison between the protein fractions MmP and MmG.

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SOV/20-124-4-60/67

On the Differences in the Antigen Structure of the Cytoplasm Granulae of the Liver and of the Hepatoma in Mice

The results attained in the agar medium by the method of precipitation were compared with those obtained by the method of anaphylaxis (with desensitization). Table 1 shows that the two methods yielded identical results (cf. Refs 6,9). Thus the two above mentioned methods lead to the detection of a specific antigen in the heparoma granulae in mice which is but absent in the liver. At the same time antigens were found in the liver granulae which disappear on cancerization. The method described facilitates the evaluation of the behavior of individual antigens in complex systems, and opens new ways of their chemical isolation. - There are 3 figures, 1 table, and 11 references, 7 of which are Soviet.

ASSOCIATION: Institut epidemiologii i mikrobiologii im. N. F. Gamaleya Akademii meditsinskikh nauk SSSR (Institute of Epidemiology and Microbiology imeni N. F. Gamaley of the Academy of Medical Sciences, USSR)

SUBMITTED: September 4, 1958

Card 3/3

17(3)

AUTHORS:

SOV/20-124-6-40/55
Abelev, G. I., Avenirova, Z. A.,
Engel'gardt, N. V., Baydakova, Z. L., Stepanchenok-Tudnik, G. I.

TITLE:

An Organospecific Antigen of the Liver Absent in the Hepatoma
(Organospetsificheskiy antigen pecheni, otsutstvuyushchiy v
gepatome)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 6, pp 1328-1330
(USSR)

ABSTRACT:

The problem of the antigen simplification in malignisation
arised when it was proved (Refs 1-3) that mitochondria and
microsomes of the liver are losing the organospecific antigen
in the experimental canceration. This simplification was
confirmed (Ref 4), but at the same time an organospecific
antigen was found in the hepatoma. Yet the question is not
solved in many respects (Ref 5). The authors investigated this
problem on cytoplasmic granulae and on a hepatoma transferable
by vaccination by means of precipitation in agar (Ref 6). For
this purpose the hepatoma and liver of C₃HA mice and other
mice species were used. The preparation method of antigens of
the mitochondria and microsomes from the liver (IMML) and from

Card 1/3

An Organospecific Antigen of the Liver Absent in the Hepatoma SOV/20-124-6-40/55

the hepatoma (MMH) and the performance of the reaction were previously described (Ref 7). The fact of antigen simplification of the MML compared with MMH, as such becomes very clear (Fig 1). The bands of the lost antigens can be seen in all preparations (up to 4 antigens in the protein fraction of the MML). It was of interest to check the organospecificity of the lost antigens. For this purpose the anti-MMP serum was partly neutralized by a solution of renal MM, the precipitate was removed and the serum obtained was determined with antigens of liver, hepatoma, kidney and spleen. It was found that the antigen bands missing in the hepatoma are also missing in the MMs of the kidney and spleen. Apparently the antigens detected by the authors are specific of the liver only. Thus the data obtained by the authors (by a different method and from a different tumor) confirm the results of Weiler (Refs 1-3). The question of the occurrence of organospecific antigens in the hepatoma remains unsolved. The authors succeeded in isolating one of these antigens (AO) and in investigating its immunologic specificity. This isolation is based on the fact that AO is most closely connected with the MML-wall and is left there after the extraction of the other agents.

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An Organospecific Antigen of the Liver Absent in the Hepatoma SOV/20-124-6-40/55

One of the methods of AO isolation is described. Its reactions are presented in the figures 2-4. The authors were thus able to isolate one of the organospecific liver antigens which are absent in the hepatoma. The investigation is continued with regard to the explanation of its chemical nature, localization within the cell, etc. There are 4 figures, 1 table, and 9 references, 1 of which is Soviet.

PRESENTED: September 27, 1958, by V. A. Engel'gar't, Academician

SUBMITTED: September 21, 1958

Card 3/3

ENGELGARDT, N. V. (USSR)

"The study of monospecific antitumour immune sera by the method of fluorescent antibodies."

report submitted for the European Conference on Tumor Biology (ECC),
Warsaw, Poland
22-27 May 1961
Gamaleya Inst. of Epidemiology and Microbiology, M. Schukinskaya 13,
Moskva, D-182

ENGEL'GARDT, N.V.; ABELEV, G.I.

Connective tissue antibodies in monospecific antitissue sera.
Biul. eksp. biol. i med. 53 no.5:94-98 My '62.

(MIRA 15:7)

1. Iz otdela immunologii i onkologii (sav. - prof. L.A.
Zil'ber) Instituta epidemiologii i mikrobiologii imeni N.F.
Gamalei AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom
AMN SSSR L.A. Zil'berom.

(CONNECTIVE TISSUE) (ANTIGENS AND ANTIBODIES)
(SERUM)

ENGEL'GARDT, N.V.

Immunohistochemical characteristics of one of the organ-specific
antigens of the mouse liver. Biul. eksp. biol. i med. 56 no.11:
97-101 0 [i.e. N] '63. (MIRA 17:11)

1. Iz otdela immunologii i onkologii (zav. - prof. L.A. Zil'ber)
Instituta epidemiologii i mikrobiologii imeni Gamalei (dir. - prof.
P.A. Vershilova) AMN SSSR, Moskva. Predstavlena deystvitel'ny
chlenom AMN SSSR L.A. Zil'berom.

ENGEL'GARDT, N.V.

Use of antibodies against γ -globulin in the indirect method
of fluorescent antibodies. Biul. eksp. biol. i med. 57 no.1:
67-70 Ja '64. (MIRA 17:10)

1. Otdel immunologii i onkologii (zav. - prof. L.A. Zil'ber)
Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei
(dir. - prof. P.A. Vershilova) AMN SSSR, Moskva. Predstavlena
deystvitel'nyy chlenom AMN SSSR L.A. Zil'berom.

11A

ENGELGARDT, V. A. *PROCESSING AND PROPERTIES INDEX*

ca

Degradation of adenosine triphosphate in cells. *N. A. Huxford and G. O. Lipshitz. Bull. bio. med. exptl. D. A. S. S. 1, 104-8 (1930); cf. C. A. 30, 7001².—Degradation in nucleated avian (pigeon, fowl) erythrocytes (respiration inhibited by KCN) does not lead to liberation of free H_2PO_4 . B. C. A.*

ASD-55A METALLURGICAL LITERATURE CLASSIFICATION

Ammonia formation in avian blood cells in relation to cellular respiration. V. A. Knophardt and A. A. Beav. *Biochimica J.* No. 1, 115-121 (in English) 132-3 (1936). --
Pigeon blood, debarbated and washed by centrifuging with Ringer solution, was used in a suspension in Ringer solution containing 0.5% glucose. Predominant fermentation under aerobic conditions gave no NH_3 , but under N_2 16.41% of ammonia N/ml . of erythrocytes was formed in 1 hr. Similar results were obtained with HCN (0.001 N). CO and phenylurethane. Methylene blue, alone or with HCN or N_2 , gave 32-43% in 30 min. Aerobic tests with quinone gave 8-20% in 30 min. According to the theory that adenosine triphosphoric acid is the main source of NH_3 , the molar ratio of P/NH_3 should be constant, but this was not found to be the case; hence sources of NH_3 other than adenylic acid must exist in the blood, or other stages of phosphorylation must exist in the blood, or other stages of phosphorylation at the expense of the free NH_3 , and the process of deamination must be regarded as irreversible. The addition of pyruvic acid and phosphates has only a slight effect in suppressing anaerobic NH_3 formation. S. A. K.

The Institute of Biochem., Academy of Science, USSR, Moscow

ENGELHARDT

"XVth International Congress of Physiologists", (p. 160) by Anokhin, Azimov, Belkin, Koshtoyants, Steppun, Engelhardt

SO: Advance in Contemporary Biology (USPEKHI SOVREMENNOI BIOLOGII) Vol. V, No. 1 1936

1ST AND 2ND CROSS										3RD AND 4TH CROSS									
PROCESSES AND PROPERTIES INDEX																			
<p>it had no action on the frog testes. B. C. A. Glucolytic activity of red blood cells of various mammals. V. A. Engelhardt and A. I. Kolotilova. <i>Trans. Physiol.</i> 1957 1958 10, 13-14(1958). The red blood cor- puscles of different species of mammals possess different powers of glycolysis in the intact state. When the cell membrane is broken down by hemolysis, the cells of the rabbit (possessing a high glucolytic activity in the intact state) exhibit nearly the same activity as those of the pig (which has normally little glucolytic activity). Cells of other species also possess higher potential glucolytic ac- tivity than that demonstrated in the intact state. B. C. P. A.</p>																			
<p>ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																			

The enzymic oxidation of ascorbic acid V. A. Engelhardt and V. N. Bukin. *Bull. Applied Botany, (Prilozheniye Krasn. Breeding (U. S. S. R.)),* Suppl. 64, *Vestnik Prirody*, 2, 255 (1937).—The optimum pH for ascorbinase from cabbage leaves was 5.5-5.9. With a const. quantity of the enzyme an increase in the concn. of the substrate has little effect on the speed of the oxidation. This may indicate: (1) that the concn. of ascorbic acid was at such a level where the enzyme was at a max. activity and the index K_m was less than 10%; (2) the action of ascorbinase is not direct; the limiting factor is the formation of an intermediate compd. which in the end acts as a II acceptor at the dehydrolysis of the ascorbic acid. A 10% concn. of CO has no depressing effect on the ascorbinase. It thus differs from phenolase and indophenol-oxidase and resembles hemino-enzymes with Fe, stable in the trivalent state like catalase and peroxidase. It appears that the ascorbic acid is capable of carrying all the II in the process of respiration. F. S. Joffe

L.S. Joffe

A 32.32 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND DEGREE										3RD AND 4TH DEGREE									
<p>PROCESSES AND PROPERTIES INDEX</p> <p>1A</p> <p>The stability of ascorbic acid and its dehydro forms. V. A. Engelhardt and V. N. Bukin. <i>Bull. Applied Botany, Leningrad Plant Breeding</i> (U. S. S. R.), Suppl. 84, <i>Vitamin Problems</i> 2, 200-21 (1957).— Reagents which catalyze the reversible oxidation of ascorbic acid have no influence on the nonreversible transformations. The latter are not to be considered as oxidation. They take place with the same speed in the presence or absence of O₂. Under aerobic conditions there is either no absorption of O₂ or (in a more alk. medium) the absorption is not stoichiometrically equiv. to the quantity of the disappearing dehydroascorbic acid. The latter is to be attributed to secondary reactions. In contrast to the thermostable reduced form the dehydroascorbic acid is very thermodurable. At the initial point it is destroyed in 10 minutes at 100°. At the b. p. it is destroyed instantly. At room temp. 80 to 100° is destroyed in 10-20 min. if the <i>pH</i> is around 9.0. The ascorbic acid of plant tissues when converted to the dehydro forms, under the influence of oxidizing enzymes, is just as thermostable as pure ascorbic acid which has been previously dehydrated. The dehydroascorbic acid, unstable as compared with the reduced form, presents a series of practical problems in working out methods of evaluating the raw materials with reference to the activity of the enzymes which oxidize vitamin C. J. S. Ioffe</p>																			
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000</p>																			

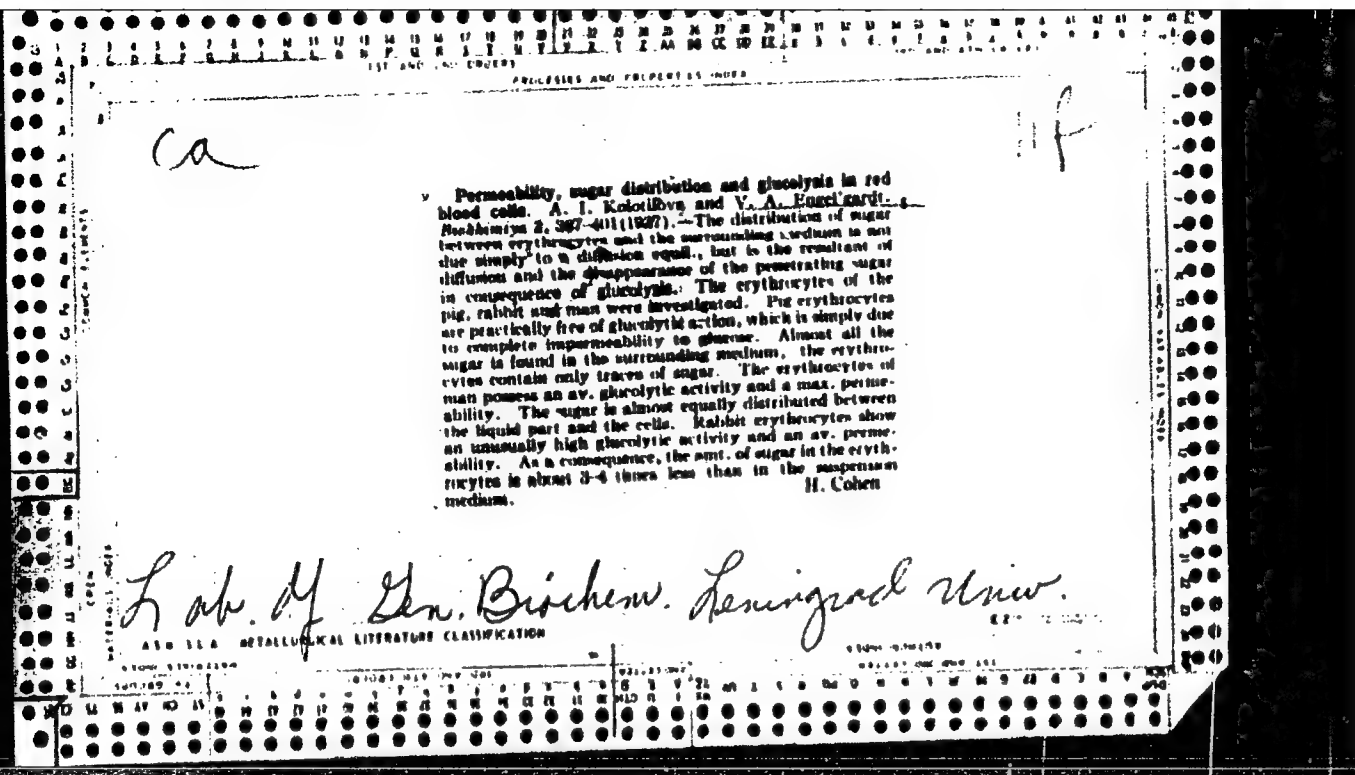
ca

11A

Enzymic oxidation of ascorbic acid. V. A. Krigelbard and V. N. Babin. *Biochimica* 2, 274-92 (1937). Ascorbic acid oxidase (I) from cabbage leaves exhibits optimal activity at pH 5.5-5.9. The amount of ascorbic acid (II) oxidized by I is independent of the II concn. probably because I acts indirectly, the limiting factor being the production of an intermediate compd. which subsequently acts as II acceptor in the dehydrogenation of II. The dehydrogenation is a reaction of zero order. CO in concn. not more than 0.5% does not inhibit the action of I. Phenolase (III) alone does not attack II but oxidizes it rapidly in presence of pyrogallol (IV), the reaction being the rate of dehydrogenation of II by the animal. Here the rate of dehydrogenation of II by the quinone produced is less than the rate of oxidation of IV by III and is the limiting factor. The II system is not invariably involved in the respiration of plant tissues although in some cases the system could deal with all the II oxidized during respiration. B. C. A.

Vitamin Laboratory, Vir, Leningrad.

ASB-514 DETAILORICAL LITERATURE CLASSIFICATION



ca 11E

PROCESSES AND PROPERTIES INDEX

Relative stabilities of ascorbic and dehydroascorbic acids. W. A. Engelhardt and V. N. Bukin. *Biochimica 2*, 507-508 (1957).—The irreversible dehydrogenation of ascorbic acid is not an oxidation process, and is not catalyzed by Cu or ascorbinase. The dehydroascorbic acid is completely destroyed when the temp. is raised to 60° for 10 min. (pH 7); at a pH of 9, about 80-90% of it is destroyed in 10-20 min. at room temp. H. Cohen

ASD SLC METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND DADERS																										PROCESS AND PROPERTIES INDEX																										3RD AND 4TH DADERS																									
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<p>Oxidative breakdown of phosphogluconic acid. V. A. Engelhardt and A. P. Barkhash. <i>Biokhimiya</i> 3, 500-51 (1968). The decompn. of phosphogluconic acid in yeast maceration juice is not fermentative but oxidative. Under anaerobic conditions, formation of CO_2 does not take place. The formation of CO_2 by the decompn. of phosphogluconic acid under aerobic conditions is due to decarboxylation of the C-6 chain. In the absence of O_2, oxidation of phosphogluconic acid may still occur when one of the following is added: methylene blue, dehydroascorbic acid, oxidized glutathione or AcH. Whether the hexose mol. is to undergo respiratory or oxidative decompn. depends on the fate of the hexosemonophosphate: if the monophosphate is oxidized to phosphogluconate, the mol. is subjected to respiratory metabolism; if a hexosediphosphate is formed from the mono-ester, then fermentation follows. H. Cohen</p>																																																																													
<p>Inst. Biochemistry, Academy of Sciences, USSR, Moscow</p>																																																																													
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ca

Adenosinetriphosphatase and myosin. M. N. Lyudimova and V. A. Engelhardt. *Biochimiya* 4, 716-30 (1939).—Adenosinetriphosphatase (I) and myosin exhibit many similarities (sol., thermostability, sensitivity to acids), and may actually be identical, although available evidence for this is still insufficient. The soln. used for the extn. of myosin (KCl and NaHCO₃) will effect a quant. extn. of I from muscle tissue. Pptn. of myosin from such solns. leads to a simultaneous pptn. of I.

H. Priestley

11A

ADENOSINETRIPHOSPHATASE AND MYOSIN

ADENOSINETRIPHOSPHATASE (I) AND MYOSIN EXHIBIT MANY SIMILARITIES (SOL., THERMOSTABILITY, SENSITIVITY TO ACIDS), AND MAY ACTUALLY BE IDENTICAL, ALTHOUGH AVAILABLE EVIDENCE FOR THIS IS STILL INSUFFICIENT. THE SOLN. USED FOR THE EXTN. OF MYOSIN (KCL AND NAHCO₃) WILL EFFECT A QUANT. EXTN. OF I FROM MUSCLE TISSUE. PPTN. OF MYOSIN FROM SUCH SOLNS. LEADS TO A SIMULTANEOUS PPTN. OF I.

H. PRIESTLEY

ADENOSINETRIPHOSPHATASE AND MYOSIN

ADENOSINETRIPHOSPHATASE (I) AND MYOSIN EXHIBIT MANY SIMILARITIES (SOL., THERMOSTABILITY, SENSITIVITY TO ACIDS), AND MAY ACTUALLY BE IDENTICAL, ALTHOUGH AVAILABLE EVIDENCE FOR THIS IS STILL INSUFFICIENT. THE SOLN. USED FOR THE EXTN. OF MYOSIN (KCL AND NAHCO₃) WILL EFFECT A QUANT. EXTN. OF I FROM MUSCLE TISSUE. PPTN. OF MYOSIN FROM SUCH SOLNS. LEADS TO A SIMULTANEOUS PPTN. OF I.

H. PRIESTLEY

ENCEL'GARDT, V. A.

"Chemism and Fermentation Agents," Mikrobiology, 8, No. 3-4, 1939.

1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX	
<p><i>Biochemistry of vitamins. V. A. Engelhardt. Trudy Vsesoyuz. Konf. o Vitanizme (Moscow, June 10-21, 1930) 1940, 31-35; Khim. Referat. Zhur. 6, No. 9, 70 (1941).—In contrast to endogenous catalysts (enzymes, hormones) vitamins are characterized as exogenous catalysts. The relation between these groups of biol. catalysts and the relation between vitamins and mediators (substances taking part in the propagation of nervous stimulation) are discussed. The vitamin requirements of plants and, especially, of microbes ("growth factors" of microbes) and the biol. significance of vitamins are discussed.</i></p> <p>W. R. Henn</p>			
<p>ATN-35A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>10000 01</p>		<p>00000 01</p>	

ENGELHARDT, V. A.

"Enzymic and mechanical properties of the muscle proteins." (p. 177) by V. A. Engelhardt.

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XIV, No. 2, 1941

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCEDURES AND PROPERTIES INDEX																			
<p><i>BC</i> <i>No. 7</i> <i>A-4</i></p> <p>Extensibility and properties of myosin when treated with... J. N. A.</p>																			
<p>ASB.S.A. METALLURGICAL LITERATURE CLASSIFICATION</p>																			
1ST COLUMN										2ND COLUMN									
3RD COLUMN										4TH COLUMN									

CA

11E

The mechanochemistry of muscle. V. A. Hagelhardt and M. N. Lyubimova. *Biochimica* 7, 206-81(1942); cf. C. A. 37, 391¹.—As is well known, myosin, the chief muscle protein, possesses adenosine triphosphatase-like enzymic properties. A study is made of the change in the enzymic properties of myosin caused by the H-ion concn. and enzymic activators and poisons. Myosin is homogeneous, as tested by the phase-rule change in soly. (cf. C. A. 39, 1427²). Nevertheless, two pH optima are observed, one at 8.2 and the other at 9.0. Ca has a strong activating action, whereas Mg, and especially Ag, are strongly inhibiting. Of the enzymic poisons, cyanides are without effect. Phlorizin and monochloroacetic acid inhibit slightly at high concns. Fluorides are active only in the presence of Ca ions. The enzymic activity of myosin is completely destroyed by urea in 18% concns. In another type of investigation ("mechanochem. effect"), myosin threads are stretched by 50-100 mg. wts., and the increases in length measured. In water solns. little stretching effect is observed. The effect is considerable in solns. of adenosinetriphosphoric acid and reaches a max. in solns. of pyrophosphoric and metaphosphoric acids. Some relationship may exist between the enzymic properties and the mech. response of the myosin thread to the action of adenosinetriphosphoric acid.

H. Priestley

Phosphoric acid and cell functions. A. A. Berg, *Acad. Sci. U.S.S.R., Ser. Biol.* 1945, 182-90 (in English, 195-6).—The energy-rich compounds of phosphoric acid appear to be the most important factors of the functional metabolism of the cell. By means of the "Parnas' principle", i.e., substitution of water in biochemical reactions by phosphoric acid, mineral P lacking any chemical energy is involved in the cycle of metabolic transformations. In the course of these processes, phosphate acquires and accumulates the liberated energy which, in the end, is to be found in the energy-rich bonds of adenosinetriphosphoric acid. It is the latter that sets into action the functional app. of the cell. The energy-liberating breakdown of the carbohydrate mol. may proceed along two paths, viz., the dichotomic path of fermentation, which consists in a disruption of the hexose mol. into two halves, or along the path of respiration which results in a successive shortening of the carbon chain of hexose owing to the alternating reactions of dehydrogenation and decarboxylation. The orientation of the process in one of the two directions (the Pasteur effect) is controlled by adenosinetriphosphoric acid which is acting here as a regulating metabolic factor. The discovery of the enzymic (adenosinetriphosphatase) property of myosin (the contractile substance of the muscle) has shown that in the muscle cell the utilization of the energy of the energy-rich phosphate compds. for the physiol. functions of the cell is secured by the fact that the catalytic agent responsible for the energy transformation is by itself a part of the operating mechanism. The phenomena discovered in the muscle may prove of more general significance. It has

actually been shown that in a quite different kind of a cell, viz., the spermatozoa, the motor function is also directly connected with the transformations of adenosinetriphosphoric acid. When the processes leading to synthesis of adenosinetriphosphate are inhibited, the motility of the sperm disappears as soon as the supply of this compd. in the cell is exhausted; upon resynthesis of the split adenosinetriphosphoric acid motility is restored. The regularities relating to the motor function of the cell may be regarded as a particular case of a more general principle of an "actor-catalyst".—It is not the metabolic processes, such as respiration and fermentation, themselves, but their products, the energy-rich phosphates, that set in motion the functional app. of the cell. The role of the metabolic processes may be compared to that of a plant producing explosive substances; the function of the cell is accomplished at the expense of the energy contained in these substances.

D. I. Macht

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND CODES										PROCESS AND PROPERTIES INDEX										3RD AND 4TH CODES									
CA										No. 3										11 C									
<p>The nature of the Harden-Young equation for cell-free fermentation. V. A. Engelhardt and I. F. Skits (Inst. Exp. Med., Leningrad). <i>Biochimicheskiye</i> 12, 350-9 (1947); cf. C.A. 39, 1501⁹.—Fermentation of sugar by yeast proceeds with the formation of equal amts. of EtOH and CO₂ (Gay-Lussac). In cell-free fermentation, of 2 sugar mols., one is fermented to EtOH and CO₂, whereas the other mol. remains in the form of hexose diphosphate (Harden-Young). The cell-free fermentation can be made to proceed in the same manner as yeast fermentation by the addn. of an enzyme which hydrolyses adenosinetriphosphate (potato apyrase). Fermentation ceases completely if a large excess (300-400%) of potato apyrase is present. This gives a means of detg. whether the atenylic system participates in biochem. processes.</p> <p>11. Priestley</p>																													
<p>ASB.SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																													
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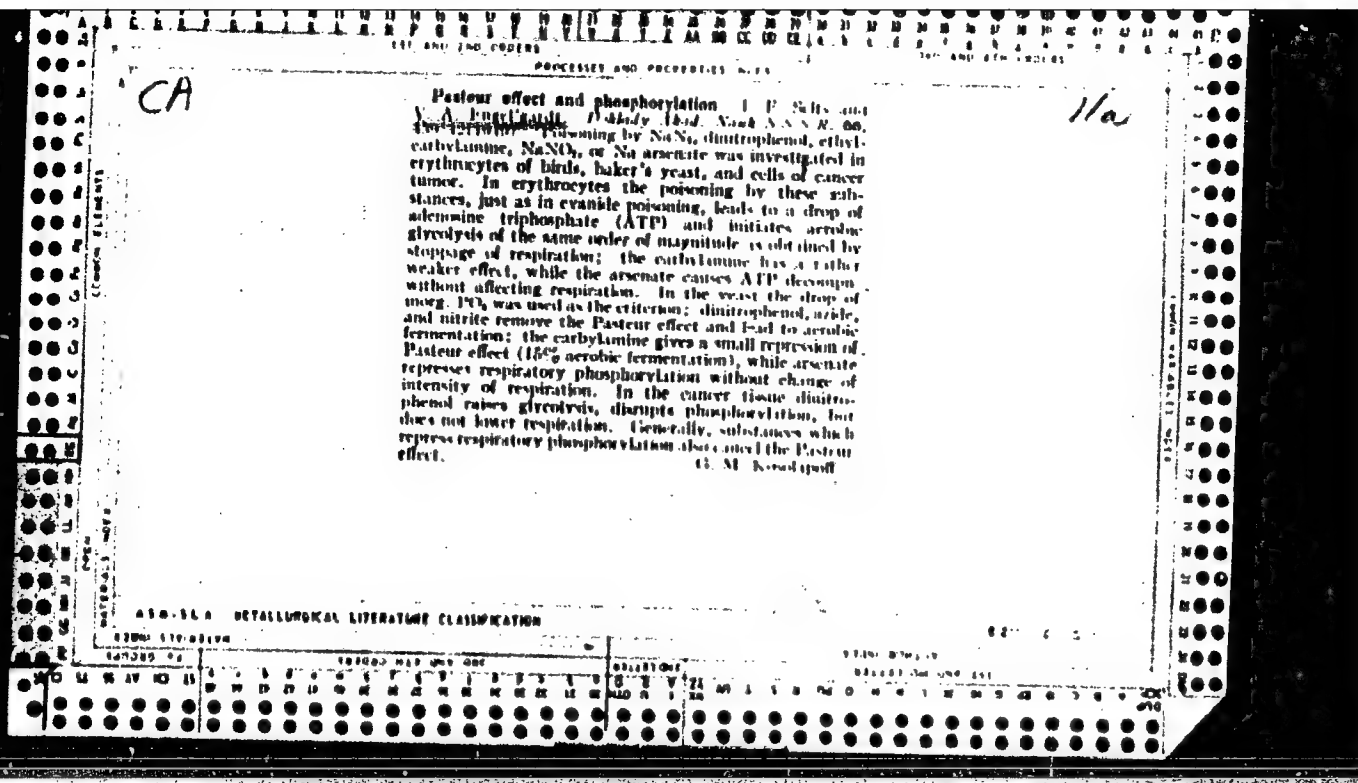
APPROVED FOR RELEASE: Thursday, July 27, 2000

CA

NO. 6

112

Respiratory phosphorylation and the Pasteur effect.
 I. P. Belits and V. A. Kuznetsov (Acad. Med. Sci., Leningrad). *Biokhimiya* 18, 487-90 (1949).—In common with methylene blue (C.A. 23, 331) and NaNO_2 (C.A. 30, 2559), 2,4-dinitrophenol and NaN_3 , when added in small amounts to nucleated pigeon erythrocytes, cause normal O_2 absorption but prevent the resynthesis of adenosine triphosphate, thus resulting in "aerobic suffocation." Not only do these substances check respiratory phosphorylation (conclusively proved in capta. with P^{32} on pigeon erythrocytes), but they also cause glycolysis during respiration; that is, they remove the Pasteur effect. EtNC, the first "Pasteur poison" for muscle tissue discovered by Warburg (C.A. 30, 3710), is less effective than 2,4-dinitrophenol and NaN_3 for pigeon erythrocytes, both as regards the prevention of phosphorylation and the removal of the Pasteur effect. Hence, a weak Pasteur poison has only a slight effect on respiratory phosphorylation. Arsenates, which are known to check symport phosphorylation, show a similar, although weaker action on respiratory phosphorylation. The action of 2,4-dinitrophenol, NaN_3 , EtNC, NaNO_2 , and Na_2HAsO_4 on baker's yeast is similar to that seen in nucleated erythrocytes, as regards respiratory phosphorylation and aerobic glycolysis. Mice cancer cells when treated with 2,4-dinitrophenol (0.0008 M) actually absorb more O_2 than normally, but the synthesis of adenosine triphosphate decreases by 51%, and lactic acid formation increases by 100%. The simultaneous disturbance of respiratory phosphorylation and the removal of the Pasteur effect point to a relationship between these 2 functions of cell respiration. It is postulated that the first action of the respiratory poisons is directed towards the processes of respiratory phosphorylation, and as a consequence the Pasteur effect is removed. H. Priestley



ENGELGARDT V. A.

6844. ENGELGARDT V. A. Enzyme systems participating in the formation of milk
Uspjehi Sovremennoi Biologii, Moscow 1950, 29/1 (60-73)

Enzymatic participation in the synthesis of lactose is as follows: (1) Formation of
galactose-1-phosphate from galactose and ATP by the enzyme galactokinase. (2) Forma-
tion of galactogen by phosphorylation. (3) Breakdown of the galactogen and combina-
tion with glucose to form lactose.
Eggers Lura - Helback

SO: Excerpta Medica, Section II, Vol III, No 12

ENGEL'GARDT, V. A.

PA 16373

USSR/Biology - Muscles

Jun 50

"Photosensitizing Action of Methylene Blue on Myosin," V. A. Engel'gardt, Com Mem, Acad Sci USSR, N. S. Demjanovskaya, T. V. Venkateru, Lab of Biochem, Physiol Inst Imeni I. P. Pavlov, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXII, No 5, pp 923-926

Authors proved by experiments the muscle protein myosin will unite not only with muscle protein action, but also with itself, in polymerization process they call "homomerization." Method of proof involved use of methylene blue in myosin

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USSR/Biology - Muscles
(Contd)

Jun 50

solution. When composite solution was exposed to light it developed great viscosity, finally becoming a gel. Noted effects of adenosinetriphosphoric acid on solution. Submitted 3 May 50

16373

C.A.

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M. V. Neustakh (In Commemoration of the 25th anniversary of the day of his death). V. A. Kozlovskiy. *Biochemistry* 16, 488-84(1961).—A biography with portrait of the biochemist M. V. Neustakh (1847-1901). H. P.

CP

Biological Chemistry
General - 11

Enzymology of myosin. Separation of adenosinetriphosphatase and deaminase. V. A. Hagl'sard, M. N. Lyubimova, T. V. Ventstern, M. Ya. Tundeva and Yu. H. Babukaya (A. N. Bakh Biochem. Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 85, 307-310 (1962).—A prep. of adenosinetriphosphatase (I) and deaminase activities of myosin was accomplished, although unequally in the quant. sense. I free deaminase can be obtained rather readily in almost 100% yield (activity) by thermal treatment, best 5 min. at 65°, since I is very thermostable. The deaminase remains in soln. while the protein bulk of myosin undergoes coagulation and seps. is readily made. The deaminase has globulin properties; on short dialysis it ppt. from soln. and continued dialysis causes a progressive decline of activity, which can be due to removal of a prosthetic group. The I free of deaminase activity is more difficult to obtain; for best results myosin preps are pptd. by salts of La (0.004M) which show selective pptn. of products with less and less deaminase activity as concn. of La is reduced. Best specimens retain about 8% of original deaminase activity. The pure deaminase preps. are unable to react with actin; best I preps. show activity comparable to that of normal myosin. Hence actin reaction is connected with the I part of the myosin complex. G. M. Kozlovskii

Engel'gardt, Corr Mem Acad Sci

USSR/Chemistry - International Congress Jan 53

"Second Biochemical Congress in Paris" By V. A. Engel'gardt, Corr Mem Acad Sci and V. N. Bukin, Professor.

Vest Ak Nauk, SSSR, No 1, 1953, pp 74-77.

Second Biochemical Congress was held in Paris in 1952. The following Soviet scientists were in the Soviet delegation: Acad A. I. Oparin (leader of the delegation), Corr Mem Acad Sci V. A. Engel'gardt, Prof A. N. Belozerskiy, V. N. Bukin, V. N. Butrov, V. N. Orekhovich. Following Russian

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papers were read: By Oparin "The Change of Action of Enzymes in Plant Cells under the influence of external effects," by Orekhovich "Procollagens, their chemical compositions, properties and biological role", by Engel'gardt "The Enzymology of Myosin", by Belozerskiy "The Antigen fractions of bacteria of the intestinal group", by Bukin "Proteid Compounds of fat-soluble vitamins." Also 3 papers of scientists who did not attend; by Acad A. V. Palladin "Research on the Biochemistry of the Cerebrum", by Corr Mem Acad Sci Kh. S. Koshtoyants "The role of the active groups of Protein Substances in the Process of Nerve Regulation" and by Dr Biol Sci N. M. Sisakyan "The Enzymatic Function of Plastids."

ENGELGARDT, V. A.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Biological Chemistry

Phosphoproteins and cerebral metabolism. V. A. Engelgardt and N. P. Lisovskaya (A. N. Bakh Inst. Biochem., Acad. Sc. U.S.S.R., Moscow). *Doklady Akad. Nauk SSSR*, Moscow, 1953, 216-221 (in French).—The specific activity of P^{32} in cerebral tissue was fractionated into inorg. (I) and protein P(II). Incubation of washed slices at 37° with P^{32} increased the specific activity of I about 2.5 times that at 0°. Similar treatment increased the specific activity of II more than 10 fold. Incubation of tissue with glucose plus NaCN, dinitrophenol, or NaF decreased markedly the specific activity of II without affecting appreciably that of I. The metabolic importance of II is discussed in the light of these findings. Herman I. Chinn

1. ENGEL'GARDT, V. A., BUKIN, V. N., Prof.
2. USSR (600)
4. Biochemistry - Congresses
7. Second biochemical congress in Paris. Vest. AN SSSR 23, no. 1, 1953.

Annual List of Russian Accessions, Library of Congress, May 1953. Unclassified.

ENGEL'GARDT. V. A.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Biological Chemistry

Contractile properties of thin threads of pure myosin. K. A. Kaban and V. A. Engel'gardt. *Doklady Akad. Nauk S.S.S.R.* 92, 385-388 (1953). Purified myosin from rabbit muscle was formed into threads according to the method of Hayashi, *et al.* (*C.A.* 47, 2762, 1952). Introduction of 0.05M KCl contg. 0.005M adenosinetriphosphate (ATP) was used as a method of induction of contraction which was measured by a tensiometer. ATP does not contract threads of globular and fibrillar actin; those of pure myosin contract vigorously (curves shown). Actomyosin threads contract best at pH 7; those of myosin at pH 9 and less at pH 7. This underscores the connection between mechanochem. contraction of muscle and its adenosinetriphosphatase activity. Myosin threads contract by 8-10% with 17-20% increase of cross section. Thus syneresis is not connected with the contraction. Original length can be maintained by a small force (1-3 mg.) on the original fiber; as ATP-induced contraction proceeds the force required to maintain length rises to some 9 mg. at pH 9, and to about 5 mg. at pH 7 or 10. Actomyosin threads in the presence of a little protein matter develop forces up to 25 mg. A poorly formed thread of myosin kept under weak tension shows little tendency to contract against a load; but once the load is relieved and the thread allowed to assume its desired length, the contraction and the contractile force rise rapidly. A well-formed myosin thread, however, begins to show contractile force immediately after contact with ATP. Myosin thread contraction is reversible and numerous contraction-relaxation cycles can be run through. Thus myosin alone is capable of contraction with ATP. It is suggested that in a muscle the F-actin serves as a support for the myosin units which are the functional units. O. M. Kosolapoff

ENGEL'GARDT, V. A.

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✓ Engel'gardt, V. A.: Vladimir Sergeevich Gulevich, 1887-
1973. Izbrannyye tudy / Selected Works. Moscow. Iz-
datel'stvo Akad. Nauk S.S.S.R. 1974. 337 pp.

ENGEL'GARDT, V. A.

USSR/Scientific Organization - Conventions

Card 1/1 Pub. 124 - 11/26

Authors : Engel'gardt, V. A.

Title : Friendly meetings of Soviet and Indian scientists

Periodical : Vest. AN SSSR 10, 57-63, Oct 1954

Abstract : Notes and observations by a member of the Soviet scientific delegation to the 41st All-Indian Scientific Congress of 1954 are presented. The names of the Soviet delegates attending the scientific congress in the city of Heyderabad, India, are listed.

Institution :

Submitted :

ENGEL'GARDT, V.A.

VENKSTERN, T.V.; ENGEL'GARDT, V.A.

[Surface localized adenosine polyphosphatase (ectoapyrase) of nucleated erythrocytes; papers and reports of the Third International Congress of Biochemistry, Brussels, 1-6 August, 1955] Poverkhnostno lokalizovannaya adenozinpolifosfatasa (ekto-spiraza) iadernnykh eritrotsitov; doklady i soobshcheniya na III Mezhdunarodnom biokhimicheskom kongresse, Brissel', 1-6 avgusta 1955 g. Moskva, Izd-vo Akad. nauk SSSR, 1955. 18 p. [Parallel texts in Russian and French].

(ADENOSINEPHOSPHATASE)

(MIRA 11:6)

(ERYTHROCYTES)

Engelhardt, V.A.

#009-PMC

✓ 1986 AEC-44-2435(PA 4) (0.1-14)
ACHIEVEMENTS AND PROSPECTS OF THE USE OF
RADIOACTIVE ISOTOPES IN BIO-CHEMISTRY. V. A.
Engelhardt. p.1-14 of CONFERENCE OF THE ACADEMY
OF SCIENCES OF THE USSR ON THE PEACEFUL USES
OF ATOMIC ENERGY, JULY 1-5, 1956 SESSION OF THE
DIVISION OF BIOLOGICAL SCIENCE. (Translation) 14p.
This paper was originally abstracted from the Russian
and appeared in Nuclear Science Abstracts as NSA 9-7853.

PMC

ENGEL'GARDT, VIT'

✓ Ecto-enzymes. Apyrase localized on the surface of nucleated erythrocytes. V. A. Engel'gardt and T. V. Venksteru (A. N. Bach Inst. Biochem., Moscow). *Congr. intern. biochim., Résumés communs., 3^e Congr. Brussels 1955*, 68 (in Russian and French).—A previous paper (cf. C.A. 49, 12550) is extended. The enzymic anatomy of cells is discussed. About 85% of the apyrase (adenosinepolyposphatase) (I) of the nucleated erythrocytes [of birds] is on the surface of the cell. This ecto-I is not only spatially localized, but is also spatially oriented since it acts only on substrates in the external medium, but not on those within the cell. Destruction of the cells by hemolysis reduces its activity by 60%. It has some relation to the adenosinetriphosphatase found in the non-nucleated erythrocytes of mammals by other workers. W. C. Tobie

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ENGEL'GRADT, V.

"USSR Work in Biochemistry Involving use of the Isotope Method", Meditsinskiy Rabotnik, Vol. 18, No. 60, pp 2-3, 1955.

[Comment: This report gives pertinent excerpts from an article by Academician V. Engel'gardt entitled "Isotopes in Biochemistry," published in Meditsinskiy Rabotnik, Vol. 18, No. 60, 22 July 1955.]

Summary of Article-W-31462, 26 Sept 1955.

ENGEL'GARDT, V. A.

"The role played by oxidation substrates and by adenosine-triphosphate in phosphoprotein metabolism," V. A. Engel'gardt and N. P. Lisovskaya (A. N. Bakh Inst. Biochem., Acad. Sci. USSR, Moscow). Biokhimiya 20, 225-35 (1955).

The phosphoprotein metabolism of the brain is highly responsive to the presence of oxidation substrates such as glucose and mannose, but not to galactose, fructose, glutamic acid, and some components of the tricarboxylic acid cycle. A definite parallelism exists between the rates of phosphoprotein metabolism and adenosinetriphosphate (ATP) metabolism in the brain cells. Any reaction which causes the decompn. of ATP at the same time arrests phosphoprotein metabolism. The presence of ATP is a necessary but is not the singular condition for the proper phosphoprotein metabolism, since in some expts. in which the resynthesis of ATP (oxidation of fructose and of pyruvic acid) was high showed only slight evidence of phosphoprotein metabolism.

B.S. Levine

Are adenosinetriphosphatase and myosin identical?

V. A. Regel'gardt and G. A. Yarovaya (Inst. Biochem., Acad. Sci. U.S.S.R., Moscow). *Ukrain. Biokhim. Zhur.* 27, 312-23(1965)(in Russian).—The object of the expts. was to det. whether the properties of adenosinetriphosphatase (I) are those of myosin (II) or whether there is in II prepne. a single specific and independent I which can not be obtained in a pure II-free state by any of the available methods of prepn. The expts. were performed with thrice-washed II of rabbit muscles. When the addn. of adenosinetriphosphate (ATP) to the II prepn. failed to lower its viscosity, the freedom of II from actomyosin was thought to have been established. The test was performed as follows: to 1 ml. of soln. of II contg. 3 mg. of protein/ml. was added 1 ml. soln. of polymerized actin (4 mg./ml.) directly in the viscosimeter at 20°. Control tests were made to det. the effect of temp. from 20 to 45° on the phosphatase activity of II and its ability to react with actin. Changes were detd. in the activity of I of II and its reactivity with actin at pH 4.0-10.0; changes in the I activity and its reactivity with actin at Cd-ion concns. of 0.1, 10^{-4} , 10^{-6} , 2×10^{-4} , 5×10^{-6} , and $10^{-8}M$; changes in I activity of II and its reactivity with actin at Ag-ion concns. of 0, 10^{-4} , 5×10^{-4} , 10^{-4} , and $10^{-6}M$. Results indicated that under all exptl. conditions changes in the properties of II to split ATP and to react with actin ran parallel courses qualitatively and quantitatively, although the data related to the changes in the enzymic activity were of a higher level than those related to reactivity with actin. An extensive theoretical discussion is presented as a result of which it is concluded that at a given activity I and reactivity with actin belong to one and the same protein presently known as II, but which should hereafter be called creatine-myosin. H. B. J.